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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,172	02/27/2004	Shin-ichi Uehara	Q80096	4907
23373	7590	12/28/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			FINEMAN, LEE A	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/787,172

Applicant(s)

UEHARA ET AL.

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 6-14 and 17-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/27/04 & 12/13/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species I in the reply filed on 6 October 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 6-14 and 17-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, said fixing unit provided along a side extending in a longitudinal direction of said convex lens (claim 2 or 15); said fixing unit provided along a side extending in a direction orthogonal to a longitudinal direction of said convex lens or orthogonal to the longitudinal direction of said semicylindrical lens (claim 3); wherein said optical unit is a fly-eye lens having a plurality of convex lens in which a lens pitch in one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other and said fixing unit is provided along a short side of said optical unit (claim 4); wherein said optical unit is a fly-eye lens having a plurality of convex lens in which a lens pitch in one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other and said fixing unit is provided along a side orthogonal to a short side of said optical

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unit (claim 5 or 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Claims 4, 5 and 16 are objected to because of the following informalities:

Regarding claim 4 and 16, the limitation “the fly-eye lens” lacks antecedent basis.

Further, the preamble of claim 4 refers to “a three-dimensional image display device according to claim 1” when claim 1 refers to only an image display device. Therefore, “three-dimensional” should be removed.

Regarding claim 5, the limitations “the side” and “the short side” lack antecedent basis.

Appropriate correction is required.

5. Claims 15 and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 15 adds the limitation “wherein said fixing unit is provided along the side extending in a direction orthogonal to the longitudinal direction of said convex lens or the longitudinal direction of said semicylindrical lens in said optical unit” allowing the fixing unit to be in either direction, which makes the claim more broad than the claim from which it depends. Likewise claim 16 adds the limitation “wherein said fixing unit is provided along the side orthogonal to the short side of said optical unit” allowing the fixing unit to be in either direction, which makes the claim more broad than the claim from which it depends.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Eichenlaub, US 5,500,765 (henceforth Eichenlaub '765).

Regarding claim 1, Eichenlaub '765 discloses in fig. 5 an image display device, (100) comprising: a display panel (112) which has a plurality of pixel sections (122) each of which includes at least a pixel displaying an image for the first viewpoint and a pixel displaying an image for the second viewpoint, said pixel sections being provided periodically in one direction (see column 4, line 59-column 5, line 7); and an optical unit (118) refracts the light emitted from said pixels and emits the light in directions different from each other (column 6, lines 46-53), and a fixing unit (hinge, not shown in fig. 5, see fig. 1) which is provide on at least a part of an area enclosing an image display area of said display panel, said fixing unit fixes said optical unit to said display panel (column 6, lines 56-58).

Regarding claim 3 and 15, Eichenlaub '765 further discloses wherein said optical unit is a lenticular lens (118) having a plurality of semicylindrical lenses (fig. 5A), longitudinal direction of which is perpendicular to said one direction (fig. 5), and said fixing unit (hinge, not shown in fig. 5, see fig. 1) is provided along the side extending in a direction orthogonal to the longitudinal direction of said semicylindrical lens in said optical unit.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eichenlaub '765.

Eichenlaub '765 discloses the claimed invention except for the rearrangement of said fixing unit to be provided along the side extending in the longitudinal direction of said semicylindrical lens in said optical unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the fixing unit to be provided along the side extending in the longitudinal direction of said semicylindrical lens in said optical unit, since it has been held that a mere rearrangement of an element without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the fixing unit to be provided along the side extending in the longitudinal direction of said semicylindrical lens in said optical unit for the purpose of preventing accidental/unwanted closures of the lens sheet due to gravity. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

10. Claims 4-5 and 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eichenlaub '765 in view of Eichenlaub, US 5,410,345 (henceforth Eichenlaub '345).

Regarding claim 5 and 16, Eichenlaub '765 further discloses wherein the optical unit is a fly-eye lens having a plurality of convex lenses (column 6, lines 48-49) but is silent to the lens

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pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other. Eichenlaub '345 teaches in fig. 13 that fly-eye lenses (178) with the lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other are a well known lens array in the stereoscopic art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a fly-eye lens with the lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other as taught by Eichenlaub '345 in the system of Eichenlaub '765 as they are commonly available and easy to obtain type of lens array. Therefore, said fixing unit (hinge, not shown in fig. 5, see fig. 1) is provided along the side orthogonal to the short side of said optical unit.

Regarding claim 4, Eichenlaub '765 in view of Eichenlaub '345 as set forth above discloses the claimed invention except for the rearrangement of said fixing unit to be provided along a short side of said optical unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the fixing unit to be provided along a short side of said optical unit, since it has been held that a mere rearrangement of an element without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the fixing unit to be provided along a short side of said optical unit for the purpose of preventing accidental/unwanted closures of the lens sheet due to gravity. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Snaper et al., US 4,140,370, Corrales, US 2003/0035135 A1 and Imai, US 5,930,037 disclose stereoscopic systems with an optical unit fixed to a display.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF

December 19, 2005



MARK A. ROBINSON
PRIMARY EXAMINER